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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/626,291

07/24/2003

Daniel F. Hall

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30223

7590

07/26/2007

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EXAMINER

THOMAS, BRANDI N

ART UNIT

PAPER NUMBER

2873

MAIL DATE

DELIVERY MODE

07/26/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/626,291

Applicant(s)

HALL ET AL.

Examiner

Brandi N. Thomas

Art Unit

2873

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 02 May 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-9 and 18-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 18-20 is/are allowed.
- 6) ☒ Claim(s) 1-4, 6 and 9 is/are rejected.
- 7) ☒ Claim(s) 5, 7 and 8 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application
- ☒ Other: Detailed Action

## DETAILED ACTION

### *Information Disclosure Statement*

1. Acknowledgement is made of receipt of Information Disclosure Statement(s) (PTO-1449) filed 7/5/07. An initialed copy is attached to this Office Action.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-3, 6, and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hodge (5597149).

Regarding claims 1 and 3, Hodge et al. discloses, in figure 1, a cast bench for holding laser components comprising: a base (10) having a top surface (col. 1, lines 35-37); a plurality of optical component supports (20) cast with said base (10) and extending from said top surface (figure 1), said optical component supports (20) being positioned to support optical components (14) (col. 1, lines 37-41) but does not specifically disclose the supports integral with the base. It would have been obvious to modify the invention to construct the supports integral with the base, since it has been held that forming in one piece an article which has formerly been formed in two pieces and put together involves only routine skill in the art (Howard v. Detroit Stove Works, 150 U.S. 164 (1893)). Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the invention to construct the supports integral with the base for the purpose of retaining the support posts (col. 1, lines 37-41).

Regarding claim 2, Hodge et al. discloses, in figure 1, a cast bench for holding laser components, wherein said optical component supports (20) are provided in a plurality of heights, in a plurality of widths, (the posts are adjustable) (col. 1, lines 45-47), and in a plurality of areas throughout said top surface of said base (10) (col. 1, lines 37-41) and (col. 2, lines 46-51).

Regarding claim 6, Hodge et al. discloses, in figure 1, a cast bench for holding laser components, wherein at least two of said optical component supports (20) are sized and positioned to act in concert to hold a single optical component (14) (col. 1, 37-41).

Regarding claim 9, Hodge et al. discloses, in figure 1, a cast bench for holding laser components, wherein a plurality of said optical component supports (20 and 22) are provided with threaded holes (21) therein for accepting optical components (14) or intermediate optical component mounts (col. 1, lines 37-44).

4. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hodge (5597149) as applied to claim 1 above, and further in view of Willis (6771437 B1).

Regarding claim 4, Dodge discloses, in figure 1, a cast bench (10) for holding laser components but does not specifically disclose a kinematic mount area provided in said top surface of said base, said kinematic mount area comprising a kinematic mount cone, a kinematic mount groove, and a kinematic mount flat surface. Willis discloses, in figures 2a and 2b, a kinematic mount area provided in said top surface of said base (210), said kinematic mount area comprising a kinematic mount cone (215), a kinematic mount groove (215a), and a kinematic mount flat surface (x and z mounting pads) (col. 6, lines 4-13). Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to combine the

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device of Dodge with the kinematic mount of Willis for the purpose of constraining the optical bench (col. 2, lines 7-14).

*Allowable Subject Matter*

5. Claims 18-20 are allowed.

6. Claims 5, 7, and 8 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7. The prior art taken either singularly or in combination fails to anticipate or fairly suggest the limitations of the independent claim(s), in such a manner that a rejection under 35 U.S.C. 102 or 103 would be proper. The prior art fails to teach a combination of all the claimed features as presented in claim(s) 7, 18, and 19, wherein the claimed invention comprises, in claim 7, at least one aperture cast into said bench being adapted to accept conduits therethrough for connection to components mounted on said bench; in claim 18, support struts spaced beneath said cast base to form a first region and a second region of said cast bench, said first region support struts spaced more closely together than the support struts of said second region; in claim 19, a main oscillator mounted on said kinematic mount components and a gain module mounted on said base at said second region, as claimed.

*Response to Arguments*

Applicant's arguments filed 5/2/07 have been fully considered but they are not persuasive. Applicant argues that the mounting system of Dodge teaches away from the claimed invention and would be rendered unsatisfactory for its intended purpose - flexibility to move posts around an optical bench. However, making the supports flexible or inflexible does not

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render the applicant patentable. It would have been obvious to modify the invention to construct the supports integral with the base, since it has been held that forming in one piece an article which has formerly been formed in two pieces and put together involves only routine skill in the art (Howard v. Detroit Stove Works, 150 U.S. 164 (1893)). Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the invention to construct the supports integral with the base for the purpose of retaining the support posts (col. 1, lines 37-41). The supports, whether flexible or in flexible, serve similar functions. Applicant argues that Hodge fails to disclose at least one claim element - optical component supports provided in a plurality of widths. However, Hodge discloses, wherein the diameter of the bored hole may be adjusted by rotating the clamping screw, thereby drawing the jaw toward the adjustment end and reducing the width of the clamp slot. The effect is that the clamping base may grip an object or a post by squeezing around the exterior of the post (col. 2, lines 46-51). Therefore, posts with larger width are capable of fitting in the clamping base. Applicants argue that Hodge fails to disclose at least two optical component supports for supporting a single optical component. However, posts 20 and 22 are used to hold optical component (figures 3 and 4).

### *Conclusion*

1. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after

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the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brandi N. Thomas whose telephone number is 571-272-2341. The examiner can normally be reached on Monday - Thursday from 6-4:30.

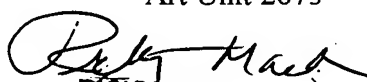
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Mack can be reached on 571-272-2333. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



BNT

Brandi N Thomas  
Examiner  
Art Unit 2873

  
RICKY MACK  
SUPERVISORY PATENT EXAMINER